

Serial No. 10/029,989
October 10, 2003
Reply to the Office Action dated July 10, 2003
Page 6 of 9

REMARKS/ARGUMENTS

Claims 5-21 are pending in this application. By this Amendment, Applicant amends claims 5-7, 9-11, 13-16, 18 and 20, and cancels claims 1-4.

Claims 1-3, 6, 10, 11, 15, 20 and 21 were rejected under 35 U.S.C. § 102(a) as being anticipated by Tada (U.S. 5,994,980), Dai et al. (U.S. 5,790,000), Endoh et al. (U.S. 6,483,402) or Strauss et al. (U.S. 6,081,172). In addition, claims 4, 5 and 16-19 were rejected under 35 U.S.C. § 102 (a) as being anticipated by Tada (Fig. 18). And finally, claims 7-9 and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tada, Dai et al., Endoh et al. or Strauss et al. Applicant respectfully traverses these rejections.

Claim 5 has been amended to recite:

“A surface acoustic wave device comprising:
a package;
a plurality of surface acoustic wave filters having different center frequencies and included in said package; and
an impedance matching element; wherein
one of an input terminal and an output terminal of at least one of said plurality of surface acoustic wave filters is a balanced terminal and the other of the input terminal and the output terminal of said at least one of said plurality of surface acoustic wave filters is an unbalanced terminal;
one of the input terminal and the output terminal of each of said plurality of surface acoustic wave filters is a balanced terminal and the other of the input terminal and the output terminal of each of said plurality of surface acoustic wave filters is an unbalanced terminal; and
the unbalanced terminal is shared among said plurality of surface acoustic wave filters;
said impedance matching element is connected to the shared unbalanced terminal; and
said impedance matching element is an inductor connected in parallel to the unbalanced terminal.” (emphasis added)

The present invention including the features recited in claim 5 provides a surface acoustic wave device including a plurality of surface acoustic wave filters in a single

Serial No. 10/029,989
October 10, 2003
Reply to the Office Action dated July 10, 2003
Page 7 of 9

package in which the effect of mutual interference between the plurality of surface acoustic wave filters is minimized so as to provide sufficient stopband attenuation (see, for example, the paragraph bridging pages 3 and 4 of the specification of the present application).

Applicant has amended claim 5 to be in independent form and to include all of the features recited in claims 1-4.

The Examiner alleged that Fig. 18 of Tada teaches each and every feature recited in claims 4 and 5. However, Fig. 18 of Tada merely teaches a basic lattice-type filter and clearly fails to teach or suggest the specific combination and arrangement of elements recited in claim 5 of the present claimed invention.

Particularly, Tada teaches, in Fig. 18 and in col. 1, lines 46-67, an elastic surface acoustic wave filter device having balanced input terminals 105, 106 and balanced output terminals 107, 108, and that "the disclosed elastic surface acoustic wave filter [in Fig. 18] device **cannot** be used, as it is, to a system having a[n] unbalanced-to-balanced output" (emphasis added). Thus, contrary to the Examiner's allegations, Tada clearly fails to teach or suggest "one of an input terminal and an output terminal of at least one of said plurality of surface acoustic wave filters is a balanced terminal and the other of the input terminal and the output terminal of said at least one of said plurality of surface acoustic wave filters is an unbalanced terminal" and "one of the input terminal and the output terminal of each of said plurality of surface acoustic wave filters is a balanced terminal and the other of the input terminal and the output terminal of each of said plurality of surface acoustic wave filters is an unbalanced terminal" as recited in the present claimed invention.

In addition, Tada teaches separate and distinct inductors 109 which are connected in series to each of the four resonators 101, 102. None of the inductors 109 of Tada are connected in parallel to an unbalanced terminal, or are disclosed as being matching impedance elements. Thus, Tada clearly fails to teach or suggest a "impedance matching element is connected to the shared unbalanced terminal" and

Serial No. 10/029,989
October 10, 2003
Reply to the Office Action dated July 10, 2003
Page 8 of 9

"said impedance matching element is an inductor connected in parallel to the unbalanced terminal" as recited in the present claimed invention.

Although col. 2, lines 4-8 of Tada discloses "a filter of an unbalanced input-to-balanced output is realized by connecting one of the input IDTs to a ground terminals and the output IDTs to the input terminals," the specific combination and arrangement of elements used in such a filter device are neither disclosed nor shown in Tada. Thus, Applicant respectfully submits that col. 2, lines 4-8 of Tada clearly fail to teach or suggest the unique combination and arrangement of elements recited in the present claimed invention.

Therefore, Applicant respectfully submits that Tada clearly fails to teach or suggest each and every element recited in claim 5 of the present application.

Accordingly, Applicant respectfully submits that Tada fails to teach or suggest the unique combination and arrangement of elements recited in claim 5 of the present application.

In view of the foregoing amendments and remarks, Applicant respectfully submits that Claim 5 is allowable. Claims 6-21 depend upon claim 5, and are therefore allowable for at least the reasons that claim 5 is allowable.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

Serial No. 10/029,989
October 10, 2003
Reply to the Office Action dated July 10, 2003
Page 9 of 9

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

Date: October 10, 2003


Attorneys for Applicant

Joseph R. Keating
Registration No. 37,368

Christopher A. Bennett
Registration No. 46,710

KEATING & BENNETT LLP
10400 Eaton Place, Suite 312
Fairfax, VA 22030
Telephone: (703) 385-5200
Facsimile: (703) 385-5080

RECEIVED
CENTRAL FAX CENTER

OCT 10 2003

OFFICIAL